

76991

November-24-11 2:43:58 PM

N900040100

Setup Start *NS1*

Stop *NS2*

12

12

Reference:

Run Start *NR1*

Date: 11/11/24

Tooling:

Date:

Stop *NR2*

QC:

Date:

SPC (Y/N):

Date:

Draw Nbr	Revision Nbr	
D3407	Rev E	

100

0.00

100

Large Fab

0.00

Large Fab

Memo

Large Fab

Weld D3407-1/-5 using welding rod TIG174 as per Dwg D3407 & QSI 004
A/R TIG174 ROD Batch: *M 101972*

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00

110

OC

Memo

0.00

Quality Control

120

QC5- Inspect part completeness to step on W/O

0.00

120

QC

Memo

0.00

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76991

76991

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November-24-11 2:43:58 PM

Item ID: D3407-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Tow Ring
 Start Date: 24/11/2011 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 08/12/2011 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

130	White Gloss(Ref:4.3.5.2) per QSI005 4.3-Steel	0.00							
-----	---	------	--	--	--	--	--	--	--

130

Powdercoat

Powder Coating

Memo

Mask Threaded Section

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

0.00

0.00

140

QC3- Inspect Part Finish

140

QC

Quality Control

Memo

0.00

150

Identify as per dwg & Stock Location: **463**

150

Packaging

Packaging

Memo

0.00

12x M-12/02/13

12x cl 12/02/13
count

12/14 12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76991***76991***

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November-24-11 2:43:58 PM

Item ID: D3407-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Tow Ring

Start Date: 24/11/2011 Start Qty: 12.00 ***12*** Cust Item ID:
Required Date: 08/12/2011 Req'd Qty: 12.00 ***12*** Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

Handwritten: M.C.J. 12/02/14

Handwritten: M.C.J. 12/02/14
12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

November-24-11 2:44:03 PM

76991

D3407-041

Required Date: 08/12/2011

Required Qty: 12.00

IPP Rev:B 08-09-09 revE as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3407-1		Manufactured	No			100	Each	20.0000	1	12			
D3407-1													
Stem													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				20					
					76224			20					
D3407-5		Manufactured	No			100	Each	15.0000	1	12			
D3407-5													
Ring													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				15					
					74155			8					
					74881			7					
				78882				12					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

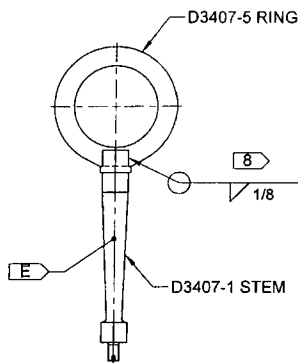
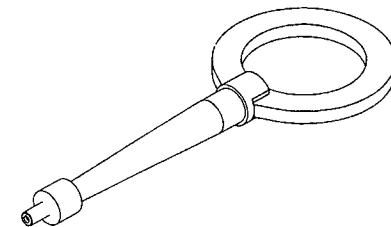
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

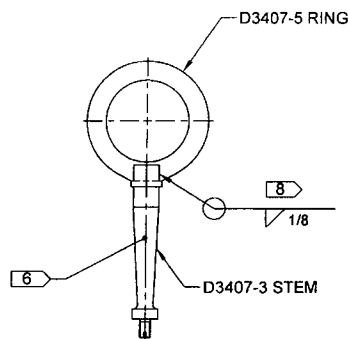
NOTE: Date & initial all entries

QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM

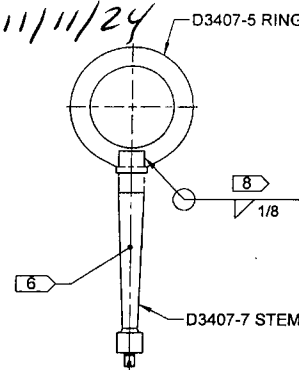
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED
SUBJECT TO AMEND
WITHOUT NO
WORK OR
NO. 76991 M.C.J
11/11/24



D3407-041 TOW RING



D3407-043 TOW RING



D3407-045 TOW RING

RELEASED

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/-3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/-3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/-3 LONGER FOR FIT W/WASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.06.17
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<div><div><div>1/2</div><div>1/2</div></div><div><div>DART AEROSPACE USA, INC.</div><div>PORT HADLOCK, WA</div><div>DRAWING NO. D3407</div><div>TITLE TOW RING</div></div></div>		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.	REV. E SHEET 1 OF SCALE NTS		
DATE	08.07.23	COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

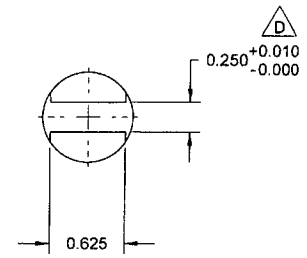
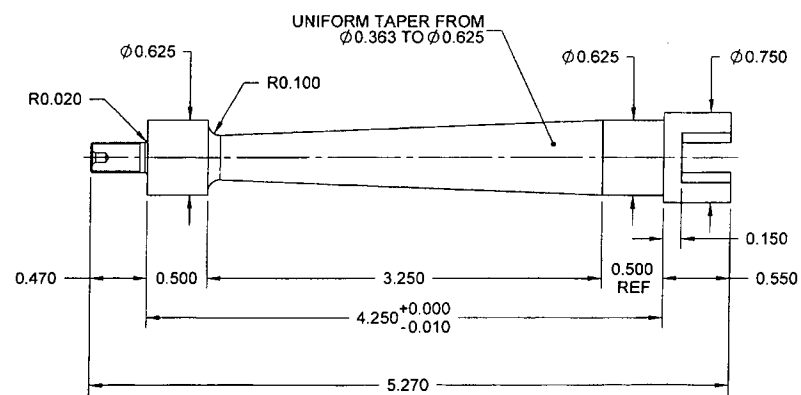
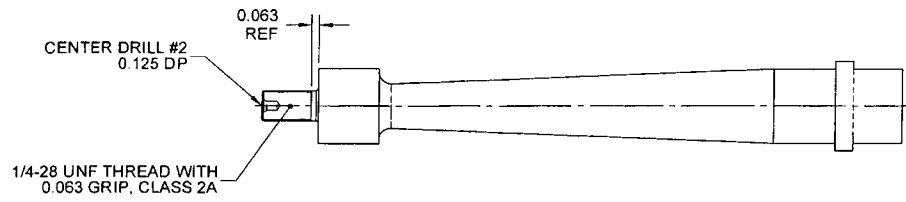
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

76991



D3407-1 STEM

RELEASED

- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.33 lbs

DESIGN		DART AEROSPACE USA, INC.	
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MFG. APPR.		D3407	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

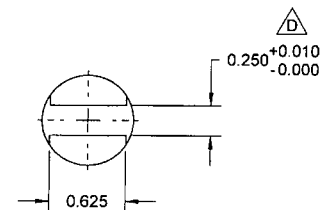
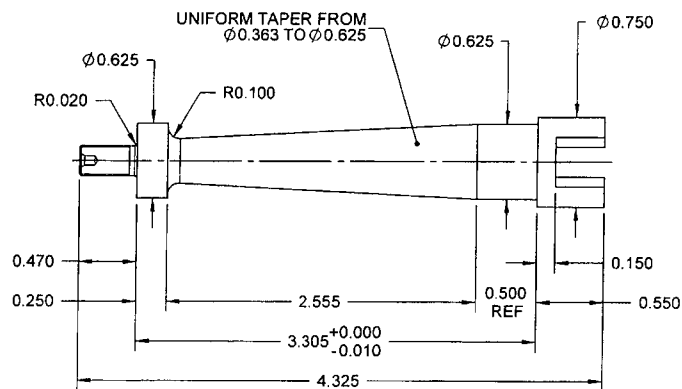
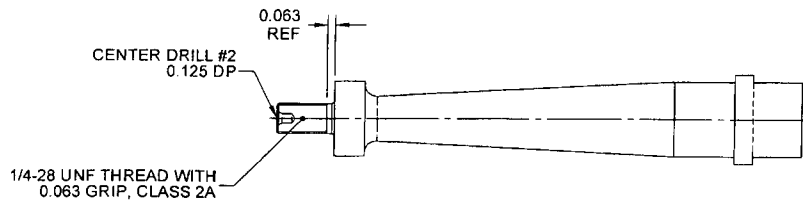
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

76991



D3407-3 STEM

RELEASED

NOTES:

- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.27 lbs

DESIGN		DART AEROSPACE USA, INC.	
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CHECKED		DRAWING NO.	REV. E
MFG. APPR.	JP	D3407	SHEET 3 OF 5
APPROVED	JP	TITLE	SCALE
DE APPR.	JP	TOW RING	NTS
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W/O:		WORK ORDER CHANGES					
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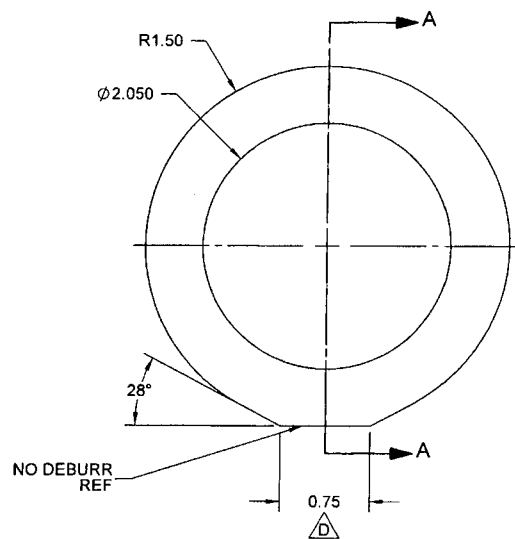
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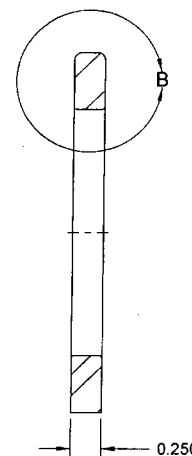
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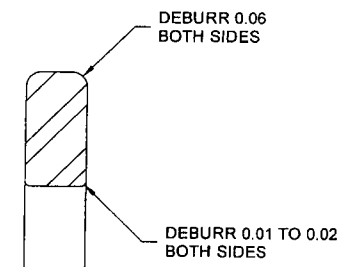
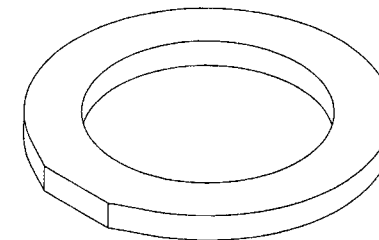
76991



D3407-5 RING



SECTION A-A



**DETAIL B
SCALE 2X**

RELEASED
06-06-2014

- NOTES:**
- 1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.27 lbs

DESIGN	90	DART AEROSPACE USA, INC.	
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CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

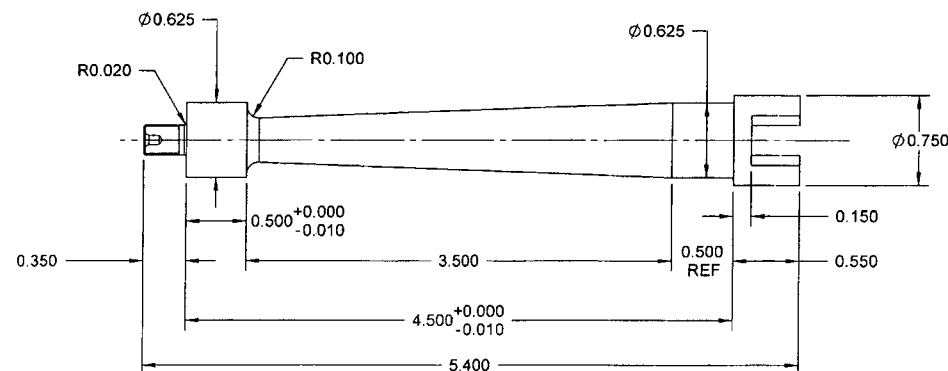
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NOTE: Date & initial all entries

76991

0.063
REF
CENTER DRILL #2
0.125 DP

1/4-28 UNF THREAD WITH
0.063 GRIP, CLASS 2A



D3407-7 STEM

- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.34 lbs

RELEASED

DESIGN	AJS	DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 5 OF 5
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